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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/732,123	12/07/2000	Moris M. Amon	10242	9609
23455	7590	01/21/2004	EXAMINER	
EXXONMOBIL CHEMICAL COMPANY			VO, HAI	
P O BOX 2149			ART UNIT	PAPER NUMBER
BAYTOWN, TX 77522-2149			1771	

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/732,123

Applicant(s)

AMON, MORIS M.

Examiner

Hai Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) 7-9 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1- 4 and 6 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Koontz (US 6,022,902). Koontz discloses a plasma treated porous polymeric layer having the porosity of 35 to 60% (column 6, lines 48-50). Koontz teaches the plasma treated porous film having the pores being accessible to fluids that contact the exterior surface of the porous film (column 6, lines 17-19). Koontz teaches the plasma treated porous film can be used as a filtration media, a carriers for immobilizing bioreactive components, a support for solid-phase organic synthesis (column 18, lines 46-53). Koontz is silent as to a receding contact angle and a pore accessibility for water. However, in the declaration filed on 08/25/2003, Applicant has calculated and provided the pore accessibility values which are correlated with the corresponding water-absorbed data disclosed in Koontz's table 3. The calculation has clearly demonstrated that the

film from Koontz has the pore accessibility meeting the specific range as required by the claims (the pore accessibility for water of at least 0.06). The films of Koontz and the present invention are made of a porous polyolefin. Both have the porosity, pore accessibility within the claimed ranges. It appears that the porosity and pore accessibility together dictates the receding contact angle for water. It is therefore not seen that the film of Koontz would have performed differently from that of the present invention with respect in the receding contact angle for water. Accordingly, Koontz anticipates or strongly suggests the claimed subject matter.

Applicant pointed out that differences in the processing steps would lead to the structural distinction from the prior art. It is noticed that the process-by-product limitations have been included in the claims. However, Applicants additionally should provide factual evidence or declaration to demonstrate that the direct contact between the plasma and film in the present invention would impart distinctive characteristic properties to the final product with respect to the receding contact angle for water in order to overcome anticipating or the finding of obviousness.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koontz (US 6,022,902) as applied to claim 1 above, in view of Chung (US 5,837,365). The primary reference is silent as to the porous substrate being isotactic polypropylene. Chung teaches a hydrophilic membrane made from isotactic polypropylene (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ isotactic polypropylene to be a porous

substrate in Koontz motivated by the desire to obtain an article that is dimensionally stable and permanently hydrophilic under operating conditions.

Response to Arguments

5. The art rejections over Koontz have been maintained because of the reasons discussed in the paragraph no. 3.
6. The art rejections over Kubota and JP-02220833 have been overcome by the present amendment and response. In the previous office action, it is the examiner's position that the receding contact angle and the pore accessibility for water would be inherently present because Applicants, Kubota and JP'833 are using the same plasma discharge to treat the surface of the porous polyolefin film. The art rejections have been withdrawn because there is no basis for inherency because both Kubota and JP'333 are both silent with the step recited in the claims, especially operating the plasma generating electrode at a higher power or frequency than the plasma attracting electrode.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on M,T,Th, F, 7:00-4:30 and on alternating Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax

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phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0994.

Hai Vo
TC 1700

HV